

ABSTRACT

Layer 7 switching may be accomplished using one or more caches placed throughout a computer network. Changes to a file on a server may be detected and propagated throughout the network. At the switch or router level, once notification of changes to a file is received, the content may be retrieved from the server and placed in a connected cache. A routing table entry may be created for the content and also placed in the cache. The routing table entry may contain an original location field identifying the original location of the content, a distance field indicating a distance from the cache to the server, and a field indicating a version number of the content. Additional fields may also be contained within the routing table entry. When a user requests a specific file, rather than forward the request directly to the server containing the original file, the request may be handled by the router closest to the user which has a connected cache containing the content. This allows a user's request to be handled much more quickly and efficiently than prior art solutions.